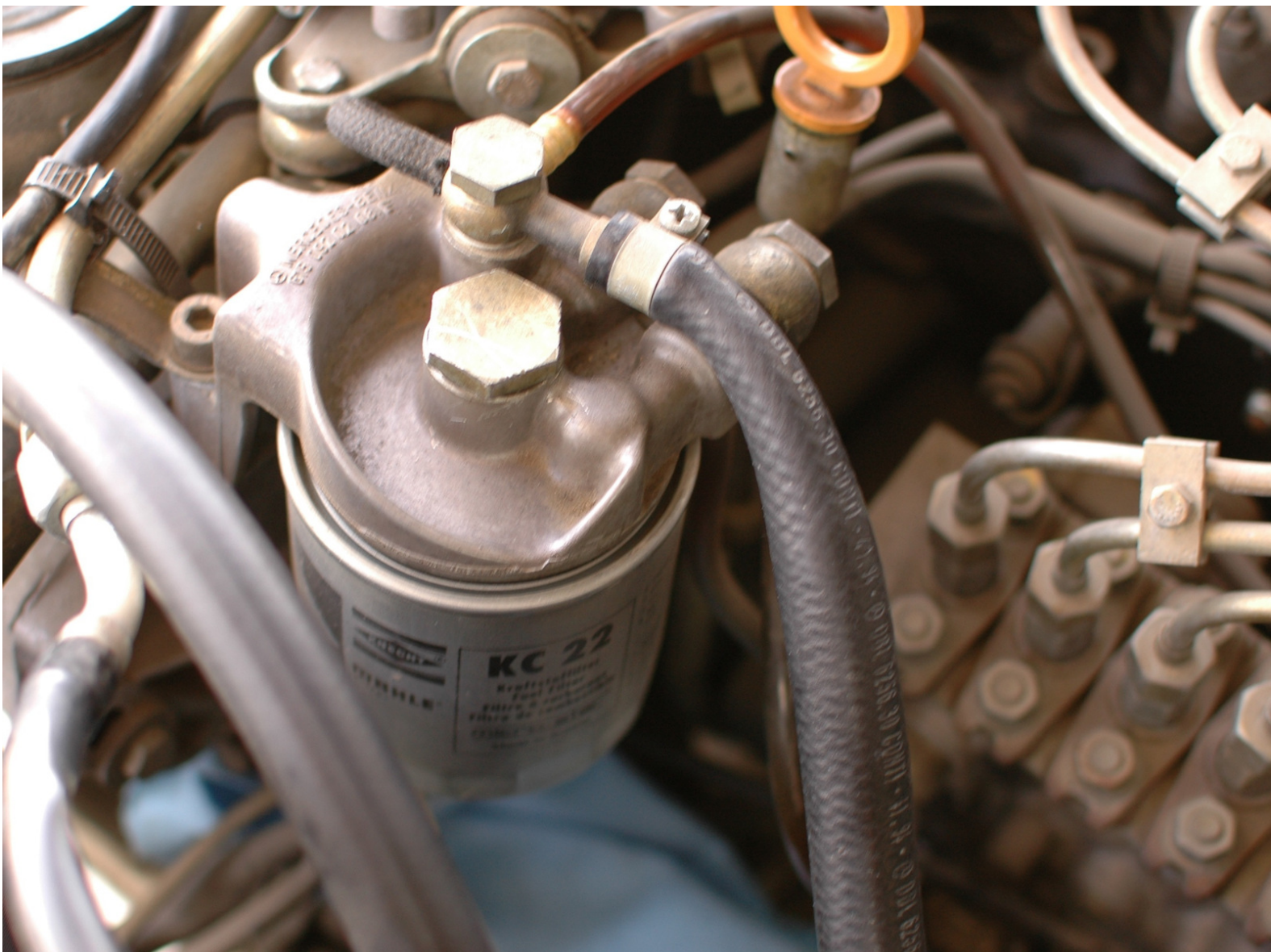




Mercedes W123 Diesel Fuel Filter, Secondary Replacement

While the primary filter before the lift pump is responsible for catching large particles in the fuel, the secondary filter keeps the fuel clean enough to pass safely through the injection pump and injector.

Written By: Nicolas Siemsen



INTRODUCTION

The secondary, larger, spin-on fuel filter on the W123 diesel engines does the heavy lifting when it comes to filtering. It keeps small particles in the fuel from damaging the injection pump and the injector nozzles.

It does a good job of this, but over time it can become clogged. Eventually, fuel flow will be limited to the point where it affects power output. Change it before that happens. Consider changing it at least every other year, depending on how much you drive. And definitely replace it after you perform a diesel purge.



TOOLS:

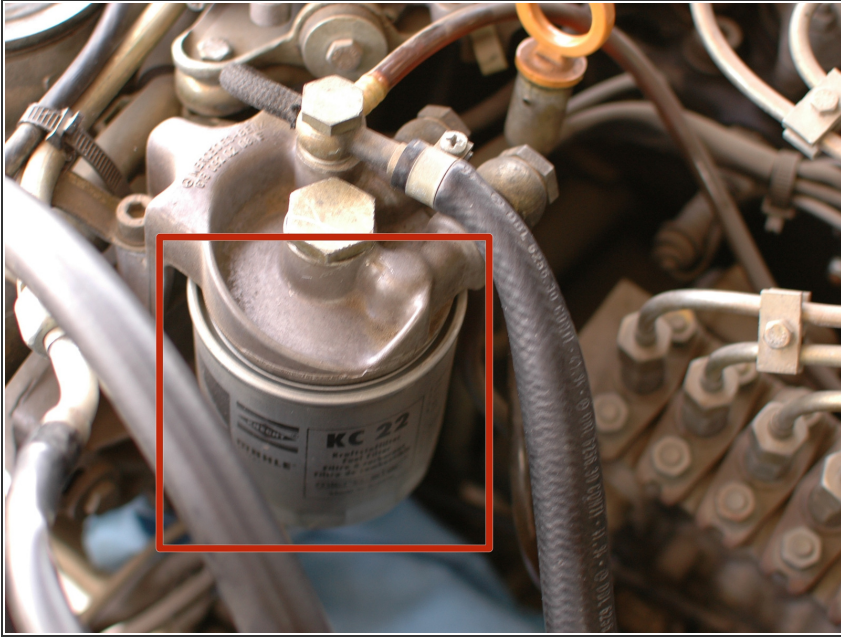
- [22mm Socket](#) (1)
early style filter
- [24mm socket](#) (1)
later style filter
- [Socket Wrench](#) (1)



PARTS:

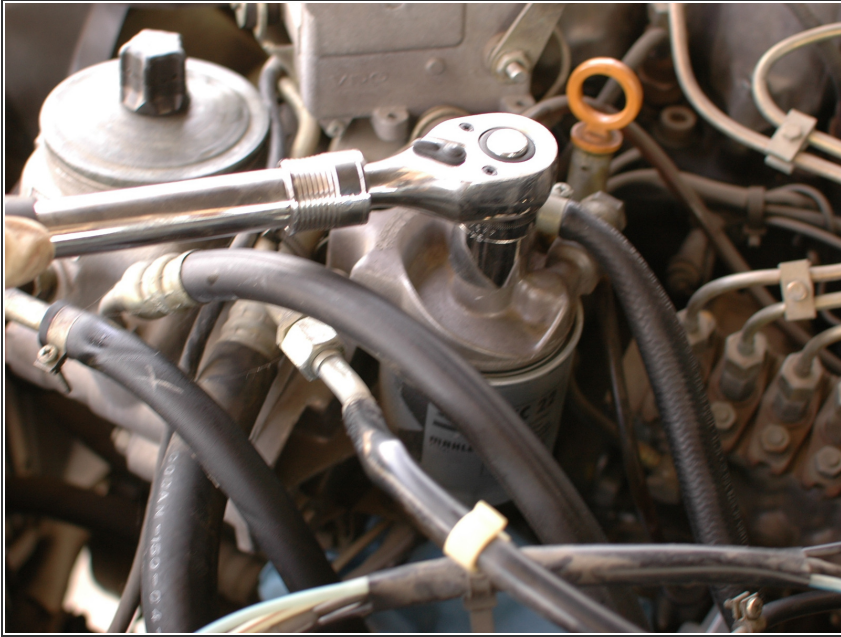
- [W123 Secondary Diesel Fuel Filter](#) (1)
- [O-rings](#) (1)
- [Crush Washer](#) (1)
early style filter

Step 1 — Fuel Filter, Secondary



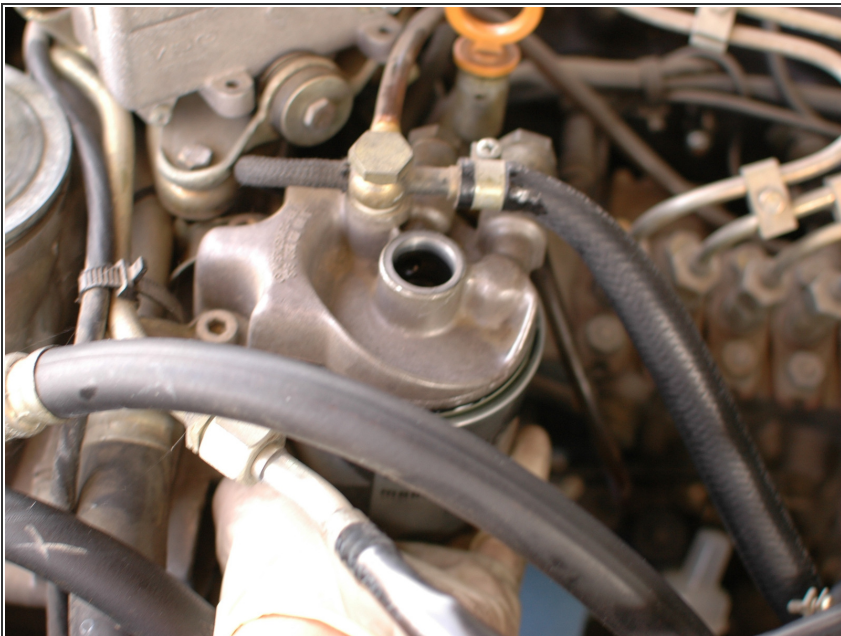
- Shown here is the large secondary fuel filter on a W123 diesel. It looks similar to oil filters you may have seen on other cars.

Step 2



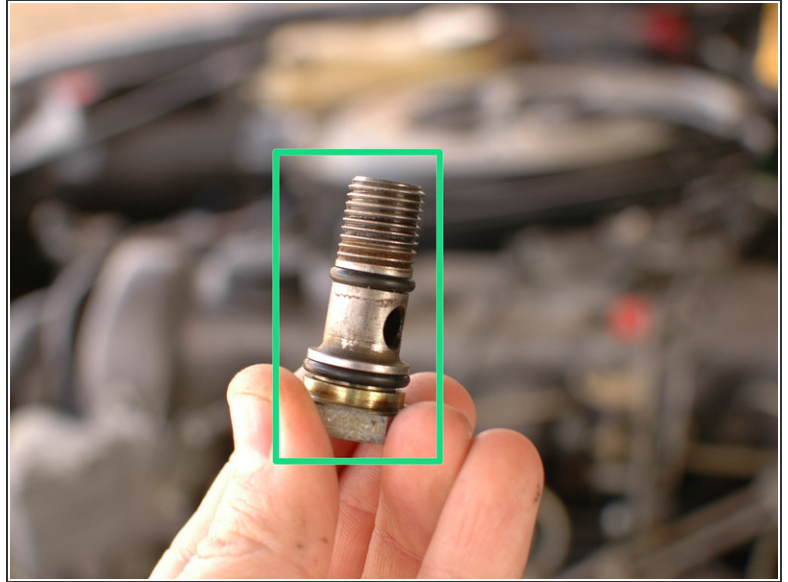
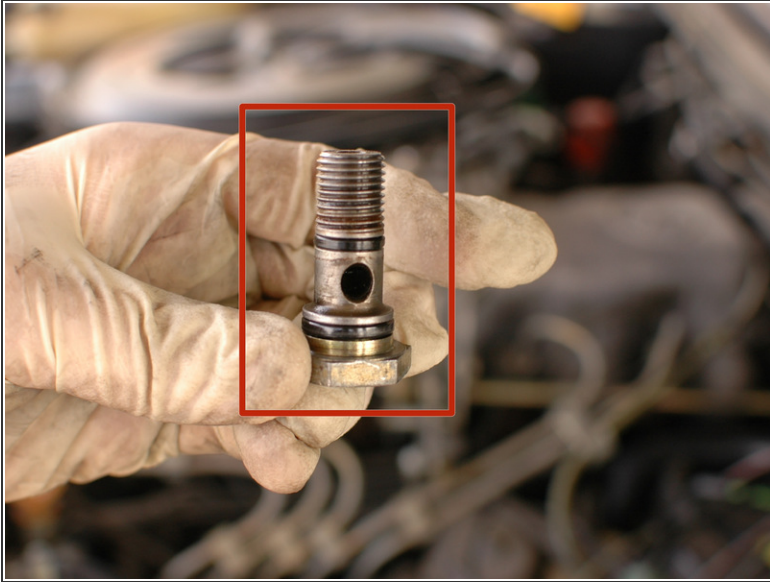
- Begin by loosening the large bolt on the top of the filter housing. There are two styles. This one is a later style, that has a 24mm bolt. An earlier style uses a 22mm bolt. You'll need to verify yours before beginning.
- Once the bolt begins to loosen, you'll need to use your other hand to hold the filter.

Step 3



- Once the bolt is fully removed, you can now carefully remove the old filter. Be aware that fuel is at the very top of the filter and may spill if you tip it.

Step 4



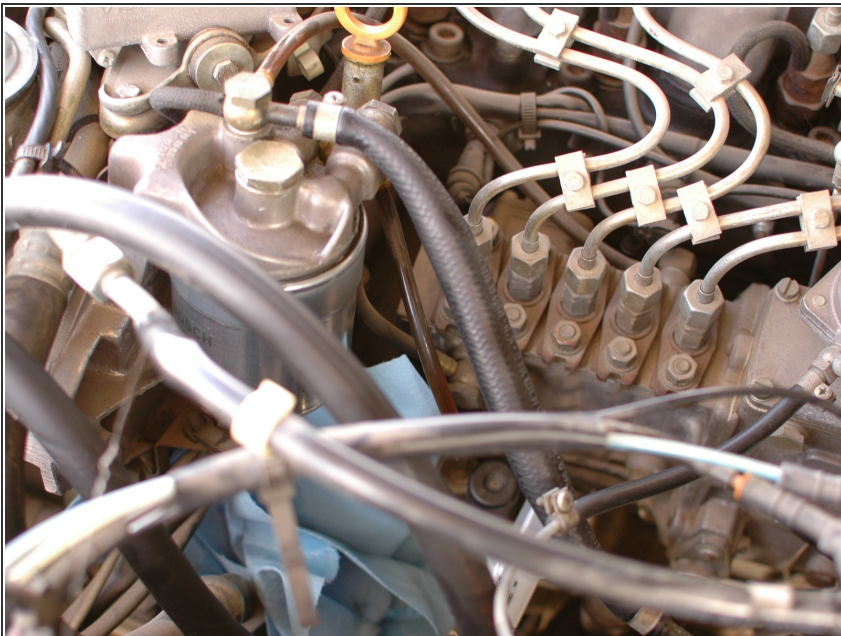
- Inspect the bolt. On the newer style, as pictured, there are two different sizes of o-rings to seal the bolt. On the earlier style, there is only one o-ring.
- On this bolt, the o-rings are old, brittle, and flattened. They need to be replaced, there are o-rings in most metric o-ring kits that will fit.
- On the early style housing there is also a copper crush washer that goes under the head of the bolt, in place of the second o-ring. This should be replaced with every filter change.
- See the new o-rings installed [here](#).

Step 5



- Fill the new filter with fuel. Diesel, or anything else that will burn safely in a diesel engine, such as virgin motor oil, virgin vegetable oil, clean automatic transmission fluid, or some diesel purge.
- Doing this will reduce the amount of fuel system priming that is necessary.

Step 6



- Re-install the filter, following this guide in reverse order.

Step 7



- Prime the system using the primer pump until the fuel pressure release valve opens. You'll be able to tell by the squeaking noise from the injection pump.
- Now is also a good time to replace the clear plastic primary fuel filter. If you'd like to do this, and need guidance, [see the primary fuel filter replacement guide](#).

After finishing, run the engine to ensure it was properly primed. If it doesn't start after 30 seconds of cranking, stop and prime some more.

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